Amendments to the Claims:

Following is a complete listing of the claims pending in the application, as amended:

1. (Currently amended) A method for auto black expansion in an image sensor, comprising:

(a) comparing the voltage level of processed pixel signals with a first set voltage level;

(b) maintaining a first count of a number of pixel signals that are above or below the first set voltage level;

(c) using the count to determine a first digital control signal for adjusting the black level calibration of the processed pixel signals; and

(d) comparing the pixel signals to a second set voltage level different from said first set voltage level and maintaining a second count related to the comparison of the pixel signals to the second level, wherein the second count is used to determine a second digital control signal for adjusting the amplification of the processed pixel signals.

2. (Original) The method of Claim 1, wherein the adjustments to the black level calibration are made in between fields of pixel signals.

3. (Original) The method of Claim 1, wherein the digital control signal comprises 8-bits.

4. (Cancelled)

5. (Cancelled).

6. (Original) The method of Claim 5, wherein adjustments to the amplification of the processed pixel signals are only made after adjustments to the black level calibration have adjusted the pixel signals to a desired voltage level.

7. (Currently amended) An image sensor for processing image signals that are comprised of processed pixel signals, the image sensor comprising:

(a) auto black expansion circuitry for adjusting the relative voltage level of the image signal;

(b) a black level voltage input;

(c) a comparator, the comparator comparing the processed pixel signals to a desired black level signal;

(d) a counter for maintaining a count related to the comparison performed by the comparator;

(e) a digital controller for utilizing the count maintained by the counter to determine desired adjustments to the auto black expansion circuitry; and

(f) a mid-level voltage input different from said black level voltage input, and a second comparator for comparing the processed pixel signals to the mid-level voltage input; and

(g) automatic gain control circuitry, wherein the digital controller utilizes the count of a second counter to determine adjustments to the automatic gain control circuitry.

8. (Cancelled)

9. (Cancelled).

10. (Currently amended) The image sensor~~processor~~ of Claim 7, wherein the adjustments to the auto black expansion circuitry are made in between fields of pixel signals.